



ORIGINAL
UNITED STATES DEPARTMENT OF COMMERCE
National Telecommunications and
Information Administration
Washington, D.C. 20230

EX PARTE LETTER FILED

September 24, 1998

Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
1919 M. St. NW
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

RE: Ex parte Letter on the Notice of Proposed Rulemaking in the Matter of 1998 Biennial Regulatory Review -- Amendment of Part 18 of the Commission's Rules to Update Regulations for RF Lighting Devices, ET Docket No. 98-42.

Dear Ms. Salas,

The National Telecommunications and Information Administration (NTIA), an Executive Branch agency within the Department of Commerce, is the President's principal adviser on domestic and international telecommunications policy, including policies relating to the Nation's economic and technological advancement in telecommunications. Accordingly, NTIA makes recommendations regarding telecommunications policies and presents Executive Branch views on telecommunications matters to the Congress, the Federal Communications Commission, and the public. NTIA, through the Office of Spectrum Management, is also responsible for managing the Federal Government's use of the radio spectrum. NTIA respectfully submits the following Reply Comments in response to the Commission's Notice of Proposed Rulemaking in the above-captioned proceeding.

NTIA supports the need for a warning label for RF lighting devices producing conducted emissions in the 0.45-30 MHz band. With regards to emission limits for RF lighting devices above 1 GHz, NTIA proposes emission limits of 50 $\mu\text{V}/\text{m}$ at 30 meters for both non-consumer and consumer devices, and a special limit of 20 $\mu\text{V}/\text{m}$ at 30 meters for the 1559-1610 MHz band. We also believe that it is important for NTIA and the Commission to confirm that the existing language in the measurement procedures (MP-5) states that a 1 MHz resolution bandwidth be used with a video bandwidth set no lower than 1 MHz actually does apply to these products. We believe this clarification is necessary to ensure protection of modern digital radio systems.

The FCC sought comment, at paragraph 7 of the NPRM, on whether any other requirements are necessary, such as advisory labels for maritime use required under the GE waiver. The United States Coast Guard comments filed on this NPRM requests that the FCC require an advisory label for all RF lighting devices capable of producing conducted emissions in the 0.45-30 MHz band. NTIA supports the Coast Guard comments and proposes the following -- **"Warning: This device may cause harmful interference to radio equipment operating in the 0.45-30 MHz frequency band. The device should not be installed in areas or environments (e.g.: ships) where telecommunication systems for safety services operate"**

At paragraph 12 of the NPRM, the FCC sought comment on whether the proposed radiated limits above 1 GHz are adequate to protect against interference to communications services that may be caused by RF lighting devices. NTIA supports the establishment of radiated limits above 1 GHz for RF lighting devices for the following reasons: (1) there are many safety-related services

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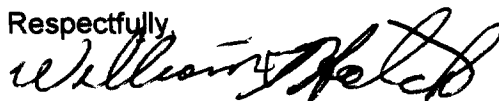
with sensitive radio systems operating above 1 GHz and, (2) the ubiquitous use of both these safety-related radio systems and RF lighting devices will increasingly bring them in close proximity to one another. NTIA believes that the establishment of these limits must consider aggregate effects because of the possible proliferation of these devices and outdoor use in large open areas such as parking lots near airports.

A single emission limit of 50 $\mu\text{V}/\text{m}$ at 30 meters for both for non-consumer and consumer devices is proposed since outdoor RF light devices will generally be classified as non-consumer devices and will have the highest potential to cause interference. In addition, we recognize the need to provide special consideration for the Radionavigation Satellite Service (RNSS). In a letter from Mr. Richard Parlow, then Associate Administrator, to Ms. Regina Keeney, Chief, International Bureau, dated September 18, 1997 (reference RM 9165), NTIA proposes emission limits for the Mobile-Satellite Service (MSS) Earth terminals operating in the 1.5/1.6 GHz band. The out-of-band emission limits NTIA requested in RM 9165 would provide the necessary protection to the RNSS in the band 1559-1610 MHz. For wideband signals such as pulsed RF lighting devices, the emission limit proposed is -70 dBW/MHz. This equates to a field strength of approximately 60 $\mu\text{V}/\text{m}$ at 30 meters. A computer program developed by NTIA was used to consider the aggregate received power from multiple emitters. The scenario considered was an airport parking lot of 100 acres with light poles every 150 feet. The analysis showed a 10 dB aggregate effect for representative RF lighting deployments. Therefore, to protect the 1559-1610 MHz band it is recommended that a field strength limit of 20 $\mu\text{V}/\text{m}$ at 30 meters be required for RF lighting devices. It should be noted that the Federal Government is in the process of identifying additional spectrum for the RNSS in the 1-2 GHz frequency range which may also need special protection when identified.

In summary, NTIA proposes that the emission limits for RF lighting devices not exceed 50 $\mu\text{V}/\text{m}$ at 30 meters for all RF lighting devices (non-consumer and consumer). In addition, there should be a special limit set for the 1559-1610 MHz band of 20 $\mu\text{V}/\text{m}$ at 30 meters for all RF lighting devices (non-consumer and consumer). Furthermore, we are asking for confirmation of the measurement procedure applicable to these devices to ensure protection of modern digital radio systems.

We are looking forward to working with the Commission on this rulemaking regarding RF lighting devices. In addition to the original, I am providing you two copies of this letter. If you have any questions regarding this subject, please call me at (202) 482-1850, or Robert Hinkle, NTIA point-of-contact, at 202-482-3212.

Respectfully,



William T. Hatch
Acting Associate Administrator
Office of Spectrum Management

cc: Dale Hatfield, FCC/OET